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THE PROBABLE INCREASE OF THE NEGRO RACE IN THE UNITED STATES.¹

IN the century-long problem of the adjustment of relations between whites and negroes in the United States the probabilities regarding the increase of each race constitute an important element. Those relations are influenced in manifold ways by the numerical proportion of the races in the country as a whole, and in its various divisions. Consequently the question of the relative growth of the two races in the near future is one of much importance. The factors controlling it are not well enough known to make any accurate forecast possible, yet perhaps we are now in a position to anticipate the course of events in this field during the century just beginning, with closer truth than has yet been done.

A starting-point may be found in certain opinions that have been expressed and controverted since the Civil War. In articles published in 1883 and 1884,² and based mainly upon the census figures for 1870 and 1880, Professor E. W. Gilliam estimated the probable negro population of the southern States alone in 1980 at 192,000,000 (or about 200,000,000 in the entire country). He estimated the probable number of whites in the country in 1985 at 336,000,000. In other words, he predicted that before the end of the twentieth century the negro race would amount to three-eighths of the total population of the United States. The errors in the bases on which this conclusion was rested, and the fallacies in the argu-

¹This article gives the substance of a lecture delivered at Harvard University in April, 1905.

²*Popular Science Monthly*, vol. xxii. pp. 433-444, and *North American Review*, vol. cxxxix. pp. 417-430.

ments by which it was supported, have been effectively exposed¹ and do not need to be restated.

In a book published in 1899 Mr. Booker T. Washington wrote,² "I think I am pretty safe in predicting that the census to be taken in 1900 will show that there are not far from ten millions of people of African descent in the United States." The number reported by the Twelfth Census fell short of this predicted number by more than 1,150,000, and, even if those enumerated by the War Department in Porto Rico and Cuba are included, a total of only about 9,700,000 is reached. Mr. Washington added,³ "It is my opinion that the rate of increase in the future will be still greater than it has been from the close of the war of the Rebellion up to the present time." The evidence against this opinion will be presented later. Neither in that book nor elsewhere, so far as I know, does he attempt an estimate for the remoter future.

In a book published in 1904 Mr. Thomas Nelson Page wrote,⁴ "Unless conditions change, it is possible that before the end of the century there may be between sixty and eighty millions of negroes in this country." And a little further on he adds,⁵ "It is true that prognostications of increase in a population often fail, but judging the future by the past and taking into account known racial characteristics, it would appear that the number thus prophesied will, in all human probability, exist in the United States by the end of the century."

The foregoing are all the estimates regarding the probable future increase of the negro race in the United States which I have met with in my reading. Unsatisfactory as the evidence is, it points to a conclusion widely different from any of these. Disregarding the figures for Porto

¹Notably by Henry Gannett, in *Popular Science Monthly*, vol. xxvii. pp. 145-150.

²*The Future of the American Negro*, p. 5.

³*Idem*, pp. 6, 7.

⁴*The Negro: The Southerner's Problem*, p. 288.

⁵*Idem*, p. 289.

Rico, Hawaii, and Alaska, the following table shows the negro population of the United States at each of the twelve censuses, and the amount and rate of increase by ten and twenty year periods.

TABLE I. *Negro population and amount and rate of increase for Continental United States by ten and twenty year periods: 1790 to 1900.*¹ (Unit = 10,000.)

Date of Census.	Negro population.	Increase during preceding		Per cent. of increase during preceding	
		10 years.	20 years.	10 years.	20 years.
1790	76				
1800	100	24	—	32.3	
1810	138	38	—	37.5	
1820	177	39	77	28.6	76.8
1830	233	56	—	31.4	
1840	287	54	110	23.4	62.2
1850	364	77	—	26.6	
1860	444	80	157	22.1	54.6
1870	488	44	—	9.9	
1880	658	170	214	34.9	48.2
1890	748	90	—	13.5	
1900	883	135	225	18.0	34.2

Table I. shows that during the nineteenth century the negroes of the United States increased, as a rule, by greater and greater amounts, but at a less and less rate. If attention is confined to the five twenty-year periods of the century, this rule is without a single exception. But, among the decennial increases, that from 1830 to 1840 was less than that from 1820 to 1830, which was probably due to the emigration of many slaveholders with their slaves from the United States to Texas between 1830 and 1840. That from 1860 to 1870 was not much above half that from 1850 to 1860, for which the Civil War and the serious omissions at the census of 1870 must be held jointly responsible; and that from 1880 to 1890 was only about half the apparent increase from 1870 to 1880. I

¹The exact census figures on which the per cents. are based and some minor explanations, unimportant for present purposes, will be found in Census Bulletin 8, *Negroes in the United States*, p. 29.

am inclined to the opinion that the census of 1890, like that of 1870, but to a much less degree, suffered from omissions in the south and especially among the negroes. To give the reasons at length would require a separate article. The most important ones are suggested by the series in the foregoing table, and are strengthened when the increase of negroes is compared with that of southern whites and the rates of increase for the two races in city and country are separately computed.

For present purposes I have sought to correct Table I. by inserting estimates in place of the census figures of 1870 and 1890. For 1870 I have taken the geometric mean of the figures for 1860 and 1880. Normally, but for the Civil War, the rate of increase in the later decade would probably have been less than in the earlier. I assume, therefore, that the effect of the war was to concentrate all the slight reduction in the rate of increase which occurred between 1860 and 1880, as compared with the rate between 1850 and 1860, in the decade 1860 to 1870, and make the rates in the decades 1860 to 1870 and 1870 to 1880 the same. This assumption raises the true number of negroes in the United States in 1870 from 4,880,000 to 5,405,000, and makes the omissions of negroes in that census 525,000. I believe the true number of negroes in 1870 was in the neighborhood of 5,400,000, and more probably less than more. If the same method of estimation be employed to determine the probable negro population of the United States in 1890, the result is 7,622,000 instead of 7,480,000, indicating the omission of 142,000 negroes by the Eleventh Census. But I see no reason, except the census figures, for believing that the rate of increase of the negroes, which fell almost steadily between 1800 and 1890, was higher between 1890 and 1900 than in the preceding decade. If any assumption at all is admissible, I believe it should be the assumption

of a decreasing rate and a constant amount of increase; or, in other words, that the true figures of 1880, 1890, and 1900 constitute an arithmetical rather than a geometrical progression. On this assumption the number of negroes in the United States in 1890 was 7,705,000 instead of 7,480,000, and the omissions of negroes at the Eleventh Census were 225,000. At any rate, these assumptions are plausible, and furnish a more uniform series than the unadjusted figures of the census upon which to attempt a forecast of the future.

The revised table is as follows, the estimated figures and per cents. being in italics:—

TABLE II. *Negro population and amount and rate of increase for Continental United States by ten and twenty year periods: 1790 to 1900 (adjusted figures in Italics). (Unit = 10,000.)*

Date of census.	Negro population.	Increase during preceding		Per cent. of increase during preceding	
		10 years.	20 years.	10 years.	20 years.
1790	76				
1800	100	24	—	32.3	
1810	138	38	—	37.5	
1820	177	39	77	28.6	76.8
1830	233	56	—	31.4	
1840	287	54	110	23.4	62.2
1850	364	77	—	26.6	
1860	444	80	157	22.1	54.6
1870	<i>541</i>	<i>97</i>	—	<i>21.7</i>	
1880	658	<i>117</i>	214	<i>21.7</i>	48.2
1890	<i>770</i>	<i>112</i>	—	<i>17.0</i>	
1900	883	<i>113</i>	225	<i>14.7</i>	34.2

The last columns of Tables I. and II. show that the rate of increase of negroes declined throughout the nineteenth century, that between 1880 and 1900 it was less than half of what it was between 1800 and 1820, and less than two-thirds of what it was between 1840 and 1860. It shows, therefore, that, if the future may be judged by the past, there is no warrant for the opinion I have quoted, "that

the rate of increase in the future will be still greater than it has been."

The estimate of Mr. Page, that the year 2000 A.D. "will in all human probability" see from 60,000,000 to 80,000,000 negroes living in the United States, appears to be reached by projecting into the future the rate of increase which prevailed between 1860 and 1880. If that rate were to persist throughout the twentieth century, there would be 63,000,000 negroes in the United States in 2000 A.D. If the rate shown by Table I. for the decade 1890 to 1900 should persist, there would be 46,000,000 negroes in the United States in 2000 A.D. If the rate shown by both tables for the twenty years, 1880 to 1900, should persist, there would be 38,000,000 negroes in the United States in 2000 A.D. If the rate shown by Table II. for 1890 to 1900 should persist, there would be about 35,000,000 negroes in the United States in 2000 A.D.; and, finally, if the rate shown in Table I. for 1880 to 1890 should persist, there would then be about 31,500,000 negroes.

If it were admissible to assume that any rate of increase would persist through the twentieth century, it would be best to accept that for the twenty years between 1880 and 1900, because it is based on the longer period and involves no correction of census figures. But the history of the nineteenth century and what is known about the increase of population concur in testifying that the rate of increase is likely to dwindle, and that 38,000,000 negroes in Continental United States in 2000 A.D. is much too large an estimate. Emancipation wrought so radical a change in the economical condition of the negro race that its increase before 1860 affords almost no clue to its probable increase in the future. The period since 1860 is too short, and the returns are affected by too large errors, admitted or suspected, to furnish much basis for a forecast. Yet, if we take as our base the

rate of increase 1880 to 1900,—namely, 34.2 per cent.,—and assume that in each score of years during the twentieth century the increase of the negroes will be less by 4 per cent. than in the preceding score of years,—and this slackening is only about one-third of that which has taken place since 1860 among the negroes, and one-half of that among the whites,—the per cents. of increase during the century just beginning will be as follows:—

1900–1920	30.2
1920–1940	26.2
1940–1960	22.2
1960–1980	18.2
1980–2000	14.2

The negro population at the end of the present century will then be less than 24,000,000. On the whole, I am disposed to believe that this assumption is as favorable to the negro race as any the facts warrant, that 25,000,000 is the maximum limit of the probable negro population of this country a century hence, and that it may fall several millions short of that figure.

Whether this opinion—for it is hardly more than that—does or does not find acceptance, there is no questioning the testimony of the figures that the rate of increase of negroes declined steadily throughout the nineteenth century, and, if we reject or disregard the census figures of 1870 and 1890, at no time so rapidly as between 1860 and 1900. This is made most obvious, perhaps, by comparing the rate of increase at each twenty-year period subsequent to 1820 with that of the preceding period treated as 100 per cent. The rate of increase 1820 to 1840 was 81.0 per cent. of that 1800 to 1820; the rate of increase 1840 to 1860 was 87.8 per cent. of that 1820 to 1840; the rate of increase 1860 to 1880 was 88.3 per cent. of that 1840 to 1860; but the rate of increase 1880 to 1900 was only 71.0 per cent. of that 1860 to 1880.

The rapid decline of white increase has been mentioned, and it might be thought that in this checking of negro increase we have to do, not with a racial problem, but with a general problem of American population. This is a superficial view. It is true that the whites in the country as a whole, in spite of the swarms of immigrants who come to swell their numbers, are growing at a slackening rate. But nearly nine-tenths of the negroes live in the southern States,—a region to which a steadily dwindling proportion of our foreign-born population goes,—and yet in the south the white population is growing with augmented rapidity. The evidence for this surprising fact has been presented in the recent census bulletin on *Negroes in the United States*,¹ and need not be repeated. Suffice it to say that, if each of the two races in the south should continue throughout the present century to increase at the rate that characterized it between 1880 and 1900, there would be in the south in 2000 A.D. about 33,000,000 negroes and 155,000,000 whites, and the negroes would constitute 17.6 per cent. of the population of the southern States, in which they now constitute 32.4 per cent. Doubtless each of the above figures is much too large; but, if the checking of growth which will appear in each race shall affect them in such a way as to keep the ratios of their increase what it has been for twenty years,—and I think this also is an assumption as favorable to the negro as the facts will warrant,—then the ratio of the above figures will be correct, and we may expect that the negroes, who in 1800 were 35.0 per cent. of the population of the southern States, who in 1840, when they were relatively most numerous, were 38.0 per cent., and who in 1900 had receded to 32.4 per cent., will continue to recede, and in 2000 A.D. are likely to be not more than 17.6 per cent. of the southern population.

¹See p. 30.

Whether these forecasts have any value depends mainly upon whether the causes of the different rates of growth of the two races at the south can be ascertained, and a judgment formed upon the question whether those causes are likely to persist and whether counteracting influences are likely to arise. This raises the question, what are the causes of the slackening rate of growth among southern negroes? That race, unlike the whites, receives practically no re-enforcement from immigration. Only 20,000 foreign-born negroes were enumerated in 1900, or about 1 in 500 of the negro population of the United States. For this reason the increase of negroes must be controlled by the balance of births and deaths.

Regarding the *birth-rate* of the southern negroes we have no direct information. In default of that the best available substitute is to compute the number of children under 5 years of age to each 1,000 women of child-bearing age; namely, 15 to 49 or 15 to 44 years of age. I reject the figures of the censuses of 1870 and 1890, both because of the acknowledged errors in the former and the suspected ones in the latter, and because in 1890 the form of the age question was different from that employed in 1880 and 1900. For the sake of comparison the figures for southern whites are introduced:—

TABLE III. *Children under 5 years of age to 1,000 women, 15 to 49 years of age, in the South Atlantic and South Central States.*

<i>Date of census.</i>	<i>Non-Caucasians.¹</i>	<i>White.</i>
1850	705	695
1860	688	682
1880	737	656
1900	577	581

¹"Non-Caucasians" is preferred to the ambiguous "colored," which means sometimes negroes, sometimes negroes, Indians, and Mongolians, and sometimes mulattoes. In every case in which non-Caucasian is used negro might be substituted for it without material inaccuracy, and for this reason I have occasionally, for the sake of variety or simplicity, used negro when non-Caucasian would be more exact.

These figures show that before the war the proportion of children to potential mothers among southern negroes and southern whites was almost the same. They show that the proportion among negroes was higher in 1880 than in 1850 or 1860, suggesting that the negro birth-rate immediately after emancipation and the re-establishment of orderly government was higher than towards the end of the slavery régime. They indicate, also, a notable and surprising fall in the birth-rate between 1880 and 1900. During the same period the proportion of children among southern whites fell steadily, but more slowly, the total decline for the fifty-year period being 128 children for 1,000 non-Caucasian women and 114 children for 1,000 white women. As a result the proportion of white children in the south in 1900 was, for the first time, greater than the proportion of negro children. Still more remarkable is the fact that during the last twenty years of the nineteenth century the decline in the proportion of southern negro children was 160 and that in the proportion of southern white children only 75. The following table shows the States in which the proportion of children is highest or lowest, and those in which the decline has been greatest. For the sake of comparison the figures for whites are added.¹ It will be noticed that the child-bearing age in this table has been defined a little more exactly than was possible from the census data of 1850 and 1860, as 15 to 44 years of age.

¹ Fuller figures on the subject will be found in *Census Bulletin* 8, pp. 68, 291-294.

TABLE IV. *Children under five years of age to 1,000 women, 15 to 44 years of age, by race for the South Atlantic and South Central States: 1880 and 1900.*

Division.	Non-Caucasians.		Whites.		Decrease in twenty years for	
	1880.	1900	1880	1890	Non-Caucasians.	Whites.
South Atlantic	787	630	666	595	157	71
Northern South Atlantic,	695	525	623	542	170	81
Delaware	632	499	516	446	133	70
Maryland	614	483	539	461	131	78
District of Columbia	428	254	420	302	174	118
Virginia	762	594	657	591	168	66
West Virginia	699	514	757	649	185	108
Southern South Atlantic,	833	674	713	653	159	60
North Carolina	838	674	703	677	164	26
South Carolina	867	712	714	630	155	84
Georgia	818	663	721	642	155	79
Florida	752	599	718	639	153	79
South Central	799	612	749	659	187	90
Eastern South Central	785	598	712	630	187	82
Kentucky	664	454	681	601	210	80
Tennessee	770	544	721	615	226	106
Alabama	792	624	734	680	168	54
Mississippi	843	652	747	675	191	72
Western South Central	824	633	813	692	191	121
Louisiana	773	620	680	652	153	28
Arkansas	863	611	845	689	252	156
Indian Territory	?	782	?	731		
Oklahoma	?	631	?	716		
Texas	869	642	853	698	227	155

Table IV. shows that in every southern State the decline in the proportion of negro children between 1880 and 1900 was much greater than the decline in the proportion of white children, and that with both races the proportion was smallest in the border States, and reached a very marked minimum in the District of Columbia. The last fact suggests that the proportion of negro children may be very small in other cities. We have figures on this only for 1890 and 1900. They show that in the entire country, outside the large cities, the proportion of negro children to 1,000 women fell from 672 in 1890 to 651 in 1900, or 21. But the proportion in the cities was 305 in 1890 and 260 in 1900, a decrease of 45. These figures show that the proportion of negro children in cities is about two-fifths of the proportion in country districts,

and has decreased in cities with more than twice the rapidity with which it has decreased in country districts. The following figures compare the proportion and decrease of negro children in southern cities and country districts with the proportion and decrease of white children.

Children under 5 years of age to 1,000 women, 15 to 44 years of age:—

Division.	In cities of 25,000+.				In rest of area.			
	Non-Caucasian.		White.		Non-Caucasian.		White.	
	1890.	1900.	1890.	1900.	1890.	1900.	1890.	1900.
South Atlantic,	311	269	385	365	685	687	627	641
South Central,	331	274	402	384	690	653	693	692

Negro children are much less numerous than white children in the cities of both divisions. They are less numerous in the country districts of the South Central division, but more numerous in the country districts of the South Atlantic. In the large cities of the South Atlantic division the decrease of negro children, 1890 to 1900, was 42 per 1,000 women, that of white children only 20. In the large cities of the South Central division the decrease of negro children was 57 per 1,000 women, that of white children only 18. Outside of these cities in the South Central division the decrease of negro children was 37 to 1,000 women, and of white children only 1. Outside of those cities in the South Atlantic division the increase of negro children was 2 to 1,000 women, and of white children the increase was 14. The growth of cities in the south and the effect of city life upon the birth-rate thus proved to be potent influences, but not the only influences producing the rapid decrease of the negro birth-rate.

Immigration of whites into the south might tend to maintain the birth-rate and the rate of increase of whites, and thus account for the growing disparity between the figures for the two races. This immigration is of two sorts, immigration of foreign-born whites and immigration of whites born in other parts of the United States. The number of foreign-born whites in the southern States, excluding Oklahoma and Indian Territory, was 516,000 in 1890 and 542,000 in 1900, an increase of only 5.0 per cent., while the increase of the whole country was 12.0 per cent. Of the total white population of the southern States in 1890 3.9 per cent. and in 1900 3.4 per cent. were of foreign birth. Immigration of foreign-born whites cannot be a very potent influence in maintaining the birth-rate or the rate of increase of southern whites.

The immigration of foreign-born whites to the southern States is not offset by any appreciable amount of emigration of white natives of the south to foreign countries. But on the part of native whites the currents of migration between the southern States and the rest of the country flow in both directions, and it is necessary to consider the net result or balance. In doing so it is best to exclude Oklahoma and Indian Territory from the southern States. In 1890 there were 1,038,000 white natives of the southern States (excluding Oklahoma and Indian Territory) living in other parts of the country: in 1900 the number had risen to 1,116,000. To offset this current there were, in 1890, 582,000 white natives of the north and west living in the south (still excluding Oklahoma and Indian Territory), and in 1900 there were 725,000. The native white population of the southern States has suffered a net loss by interchange with other parts of the country, but that loss is a decreasing one. In 1890 it was 456,000 and in 1900 it was 391,000.

As the negroes in the south receive very few recruits

from foreign countries, so, also, they receive very few recruits from the north and west. In studying these currents of migration it is necessary to include with the negroes the native Indians and Mongolians, these classes not having been distinguished from the negroes for the birthplace tables at the census of 1890. They were so few relatively as not to distort the figures. In 1890 there were 241,000 non-Caucasian natives of the south living in the north and west, in 1900 there were 349,000. In 1890 there were 22,400 non-Caucasian natives of the north and west living in the south, in 1900 there were 26,500. In 1890 the net loss of southern negroes by emigration to other parts of the country was 218,000, in 1900 it was 323,000. During the decade 1890 to 1900 the net loss of southern whites by emigration to other parts of the country decreased 65,000, and the net loss of southern negroes increased 105,000. The net loss of southern native whites by emigration to each 10,000 native whites residing in the south was 365 in 1890 and 255 in 1900. Corresponding figures for the non-Caucasians in the south were 324 in 1890 and 410 in 1900. The relative loss of the negroes in 1890 was less than that of the whites, but in 1900 it was greater by three-fifths.

The evidence thus far has indicated two of the influences at work in reducing the proportion of children, and probably the birth-rate, of southern negroes much more rapidly than of southern whites. The first is the growth of cities, especially of southern cities, and the powerful and increasing influence they exercise upon their residents, especially their negro residents, in depressing the birth-rate. The second is the decreasing net loss of southern whites and the increasing net loss of southern negroes by the currents of migration between the south and the north and west. So far as one can judge, both of these influences are likely to persist, and even to become more

potent. Indeed, they bid fair to be re-enforced by a third, which has not yet produced a noteworthy effect upon the population of the south,—the increased influx into the south of white immigrants from Europe, especially from southern Europe. The evidence in hand, therefore, meagre as it is, points to a continuance of a proportion of children among southern negroes smaller than among southern whites,—a proportion which was first manifested in 1900,—and probably to an increasing difference in this respect between the two races.

The increase of negro population in the United States is the result, as already stated, of the balance between births and deaths. It has been shown that the proportion of negro children is rapidly decreasing. But, if the proportion of them who die—or, in other words, the *death-rate*—is decreasing as fast or faster, the rate of increase might continue at its present height or even rise. It is important, therefore, to ascertain how the death-rate of the negroes is changing. This rate is known only for the registration area, as it is called; that is, for those States and cities in which the local death records are believed to be accurate enough to deserve consideration. Probably some omissions of deaths occur in nearly all parts of the registration area. Probably these omissions are more numerous in the south than in the north, and in any given place perhaps more numerous among the negroes than among the whites. Still, these figures for deaths in the registration area are the best we have. They are based upon a large non-Caucasian population, 950,000 in 1890 and 1,250,000 in 1900; and the evidence they present, although not beyond challenge, is very weighty. Among 1,000 non-Caucasians in the registration area in 1890 there were 29.9 deaths and in 1900 29.6 deaths. These figures point to a very high death-rate and to a very slight decrease between 1890 and 1900.

The largest body of statistics with which I am familiar, at all comparable with these figures, but indicating the conditions of the negroes at various times and places before the war, may be found in a government document of 1864.¹ The statistics thus collected are for the eleven cities of Boston, New Bedford, Providence, New York, Buffalo, Philadelphia, Baltimore, Washington, Charleston, New Orleans, and Memphis, and for various dates between 1818 and 1863, with the exception of Boston, the figures for which include also the period from 1725 to 1774. Returns from these cities ought to be fairly comparable with those for the registration area of 1890 and 1900, which also was largely northern and urban. The comparison is indicated in the following table:—

TABLE V. *Comparative death-rates of Non-Caucasians and whites before and after the Civil War.*

Authority.	Area covered.	Date.	Population.		Deaths.		Death-rate.	
			Non-Caucasian.	White.	Non-Caucasian.	White.	Non-Caucasian.	White.
Freedmen's Inquiry Commission	11 cities	Various years between 1725 and 1863						
Census . . .	Registration area	1890	3,031,473	37,104,875	106,217	1,001,268	35.0	27.0
Census . . .	Registration area	1900	954,935	18,704,505	28,579	357,653	29.9	19.1
			1,251,469	27,555,800	37,029	475,640	29.6	17.3

¹Thirty-eighth Congress, First Session. Senate Executive Documents No. 53: *Report of the American Freedmen's Inquiry Commission to the Secretary of War*, p. 105. The statistical work of the commission was "greatly aided by Dr. Edward Jarvis, of Boston," one of the most careful and competent students of vital statistics we have ever had in the United States. He "kindly opened to the commission the treasure of his valuable statistical library" and "personally superintended some of the researches." For a reference to this document I am indebted to my friend, Mr. Alfred H. Stone, of Greenville, Miss.

Probably these figures warrant the inferences that the death-rate of each race has greatly decreased in the United States in fifty years, and that the decrease for the negroes has been much less rapid, both absolutely and relatively to the initial amount, than it has for the whites. The death-rate indicated for negroes in 1900 is more than five-sixths (84.6 per cent.) of what it was at the earlier period. That for whites is less than two-thirds (64.1 per cent.) of what it was at the same period. At the earliest date the death-rate of negroes exceeded that of whites by 29.8 per cent. of the lower rate, in 1890 it exceeded the death-rate of whites by 56.5 per cent., and in 1900 by 71.5 per cent. Before the war the difference between the death-rates of negroes and whites was 8.0: in 1900 it was 12.3. Clearly in this field the benefits of progress are accruing more to the white than to the negro race, and the difference between the two races is growing.

In order to get more specific information, the population of each race must be divided into sex and age classes, as in the following table:—

TABLE VI. *Non-Caucasian population and deaths by sex and age in the registration area, 1890 and 1900.*

Age period.	Population.				Deaths.			
	1890.		1900.		1890.		1900.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
Under 5	42,312	43,034	50,418	51,990	5,507	5,093	6,413	5,727
5-14	86,389	91,794	98,476	105,988	882	977	910	1,085
15-44	264,999	271,049	358,707	374,415	4,841	4,289	6,743	6,075
55-64	59,324	59,205	88,170	80,932	2,211	1,729	3,407	2,800
65+	10,783	15,845	14,419	19,299	1,274	1,554	1,728	1,935

From the figures in Table VI. the death-rates of the non-Caucasians in the registration area by age and sex may be computed for 1890 and 1900, and the change for the decade estimated. The results are given in the following table, into which the death-rates of whites have been introduced for comparison:—

TABLE VII. *Death-rates by sex and age for non-Caucasian and white population of the registration area, 1890 and 1900.*

Age.	Non-Caucasians.				Whites.				Decennial increase (+) or decrease (—) for			
	Males.		Females.		Males.		Females.		Non-Caucasians.		Caucasians	
	1890.	1900.	1890.	1900.	1890.	1900.	1890.	1900.	Male.	Female.	Male.	Female.
Under 5 .	130.2	127.2	118.4	110.2	68.6	54.2	59.8	45.2	—3.0	—8.2	—14.4	—14.6
5-14 . .	10.2	9.2	10.6	10.2	5.4	4.2	5.4	4.0	—1.0	—0.4	—1.2	—1.4
15-44 . .	18.3	18.8	15.8	16.2	9.9	8.9	8.7	7.7	+0.5	+0.4	—1.0	—1.0
45-64 . .	37.3	38.6	29.2	34.6	23.9	23.5	19.5	19.5	+1.3	+5.4	—0.4	—0.4
65+ . .	118.2	119.8	98.1	100.3	80.6	90.4	75.9	82.1	+1.6	+2.2	+9.8	+6.2

The foregoing table indicates that there was a decline in the mortality of negro infants between 1890 and 1900, —a decline, however, less than half that in the mortality of white infants. There was likewise a decline in the death-rate of negro children 5 to 14 years of age, which was about half the decline in the death-rate among white children. But at the ages of early adult life, 15 to 44, the negro death-rate increased and the white decreased; and at the ages of 45 to 64 the negro death-rate increased, while that for white males fell and for white females was unchanged. At ages above 65 the death-rates of each race increased.

The slight improvement in the death-rate of negroes of all ages, between 1890 and 1900, is thus seen to be due to a decided fall in the rate for children and youth, largely

counterbalanced by an increase in the death-rate of adult and aged negroes. Apparently the death-rates of the two races, at ages between 15 and 64, are changing in opposite directions, those for whites decreasing and those for negroes decreasing. The only way of escaping this inference is to claim either that the records of deaths among negroes were kept so much more accurately in 1900 than in 1890 as to convert a real decrease among adults into an apparent increase,—which seems improbable,—or to claim that no inference can be drawn from figures relating to the registration area, 92 per cent. of the negro population of which lives in cities, to the negro population of the entire country. The last objection is weighty. The only answer to it is that we have no other evidence; that these figures, while not conclusive, are indicative, and probably do show the present tendency in a large and increasing fraction of the race. The evidence then indicates a high but rapidly decreasing birth-rate among southern negroes as a whole, a very low and rapidly decreasing birth-rate among urban negroes in all parts of the country, a high and very slowly decreasing death-rate for urban negroes, and an increase in the death-rates of urban negroes at ages above fifteen years.

Owing to the courtesy of the Census Office in furnishing me with certain figures not contained in the published volumes of the Twelfth Census, I am able to add to the preceding data, indicating the absolute and relative decrease of the negro death-rate, the following table, comparing the death-rates of white and negro in 1900 at twenty-four-age periods. To facilitate that comparison a column is added showing the ratio of the non-Caucasian death-rate to the white.

TABLE VIII. *Population, deaths, and death-rates of non-Caucasians and whites by age for the registration area, 1900.*

Age period.	Population.		Deaths.		Death-rate.		Ratio of non-Caucasian death-rate to white = 100.
	Non-Caucasian.	White.	Non-Caucasian.	White.	Non-Caucasian.	White	
Total	1,251,469	27,555,800	37,029	475,640	29.6	17.3	171
Under 5	102,408	2,842,960	12,140	141,431	118.6	49.8	238
Under 1	21,405	596,513	7,951	94,269	371.5	158.0	235
1	19,119	538,093	2,239	23,747	117.1	44.1	265
2	20,943	565,992	1,034	10,986	49.4	19.4	254
3	20,415	573,156	549	7,276	26.9	12.7	212
4	20,526	569,206	367	5,153	17.9	9.1	198
5-9	103,473	2,765,996	1,076	13,969	10.4	5.1	206
10-14	100,991	2,501,331	919	7,666	9.1	3.1	297
15-19	117,304	2,474,869	1,657	11,763	14.1	4.8	297
20-24	160,022	2,693,394	2,671	18,689	16.7	6.9	240
25-29	148,881	2,635,720	2,500	21,436	16.8	8.1	207
30-34	114,723	2,344,469	1,955	21,230	17.0	9.1	188
35-39	108,604	2,107,046	2,083	22,250	19.2	10.6	182
40-44	83,588	1,746,425	1,952	20,334	23.4	11.6	201
45-49	64,002	1,375,102	1,795	20,124	28.1	14.6	192
50-54	51,246	1,158,518	1,750	21,372	34.2	18.5	185
55-59	30,848	885,153	1,374	22,733	44.5	25.7	173
60-64	23,006	721,715	1,288	24,867	56.0	34.5	162
65-69	13,983	518,227	1,027	26,742	73.5	51.6	142
70-74	9,182	355,313	877	26,515	95.5	74.6	128
75-79	5,031	211,350	624	23,293	124.0	110.2	113
80-84	3,036	101,839	498	16,893	164.0	165.9	99
85-89	1,380	35,920	278	8,722	201.5	242.8	83
90-94	572	8,896	162	3,050	283.2	342.9	83
95+	534	2,092	197	903	368.9	431.6	85
Unknown	8,655	69,465	206	1,658	23.8	23.9	100

Table VIII. shows that in the registration area in 1900 the death-rate of negroes was greater than that of whites at each age below 80. The lower death-rate of negroes above 80 years of age indicated by the table is probably due to the large number of elderly negroes who overstate their age to the census enumerators. These errors are undoubtedly more common in the returns of age for the living population than in the returns of age for decedents. Because of them little confidence can be placed in the death-rates at very high ages. At practically all ages under 30 the death-rate of negroes is between twice and three times as great as that of whites: at ages between 30 and 65 the death-rate of negroes is less than twice,

but more than one and one-half times as great as that of whites. The difference between the races seems to reach its maximum at the healthiest period of life, 10 to 20 years of age, when the negro death-rate is about three times that of the whites, and to decrease from that age with advancing years.

The fundamental explanation of the falling birth-rate and almost stationary death-rate, seems to me to lie in a growing competition between negroes and whites, and a decrease in the relative efficiency of negroes compared with whites,—a decrease which is by no means incompatible with an increase in their efficiency when compared with their own standards under slavery or in the early years after emancipation. If such a competition has been in progress, some reflection of it should be found in the statistics of occupations.¹ In those statistics the non-Caucasians were first distinguished in 1890, so that comparisons can be made only for the last decade of the nineteenth century. By confining the figures to the south more satisfactory results are reached, both because that region contains few Indians and Mongolians, and because, if figures for the whole country are used, geographical differences between north and south might be mistaken for racial ones.

There are certain occupations in which the southern negroes have increased proportionately to the whites. Among them we may distinguish several classes.

First are those which make heavy demands upon the muscular system. Workmen in such occupations include miners and quarrymen, 29.7 per cent. of whom in the south in 1890, and 31.5 per cent. in 1900, were negroes; saw and planing mill employees, 41.6 per cent. of whom in 1890, and 46.1 per cent. in 1900, were negroes; and iron and

¹For detailed figures and a fuller analysis see Census Bulletin 8, *Negroes in the United States*, pp. 52-64 and 164-187.

steel workers, 23.2 per cent. of whom in 1890, and 31.0 per cent. in 1900, were negroes.

A second class includes those occupations requiring little skill, and in many cases followed only in an irregular or casual way. Such occupations are those of servants and waiters, 74.3 per cent. of whom in 1890, and 77.6 per cent. in 1900, were negroes.

A third class is one in which the service is rendered almost entirely to members of the negro race. Examples of these are teachers, 18.3 per cent. negro in 1890 and 19.2 per cent. in 1900; and clergymen, 36.5 per cent. negro in 1890 and 37.5 per cent. in 1900. The supply of negro clergymen relative to the negro population of the south is now greater and increasing more rapidly than the supply of white clergymen. There is a noteworthy difference in this respect between the United States and Cuba, Porto Rico and the Philippine Islands. Cuba and Porto Rico have about the same proportion of negroes as our southern States, but in the two islands in 1899 only 6 negro clergymen were reported, or one in seventy, while in the southern United States more than one clergyman in three is a negro. In this regard the Philippine Islands occupy an intermediate position. With more than 99 per. cent of the population Malay, less than three-fifths of the clergymen in the islands belong to that race.

Those occupations in which the negroes have lost ground at the south since 1890 may likewise be grouped into classes.

One class includes occupations in which persons work without close and constant supervision. This is true of draymen, hackmen, and teamsters, of whom 50.8 per cent. in 1890 and 47.1 per cent. in 1900 were negroes.

Another class includes occupations in which the amount of skill is not indicated by the group name. Here would fall: launderers and laundresses, 93.5 per cent. negroes in

1890 and 91.5 per cent. in 1900; steam railroad employees, 39.5 per cent. negroes in 1890 and 37.6 per cent. in 1900; housekeepers and stewards, 32.4 per cent. negroes in 1890 and 23.2 per cent. in 1900; engineers and firemen, 20.9 per cent. negroes in 1890 and 20.7 per cent. in 1900.

There is also a class of handicrafts which require skill and capital, in which the southern negroes lost ground. Such handicraftsmen include: carpenters, 17.8 per cent. negroes in 1890 and 16.2 per cent. in 1900; blacksmiths, 23.4 per cent. negroes in 1890 and 18.2 per cent. in 1900; barbers, 60.4 per cent. negroes in 1890 and 49.4 per cent. in 1900; fishermen and oystermen, 38.1 per cent. negroes in 1890 and 31.9 per cent. in 1900; tobacco and cigar factory operatives, 49.1 per cent. negroes in 1890 and 44.6 per cent. in 1900.

The preceding figures seem to show that the negro race at the south, in its competition with the whites, lost ground between 1890 and 1900 in the majority of skilled occupations which can be distinguished by aid of the census figures.

Confirmatory evidence may be derived from the figures for cotton-mill operatives. There is no line of expansion in the south more important than the growth of cotton mills. We are told in the special report on that industry that its growth in the south is the one great fact in the history of cotton manufacturing between 1890 and 1900. The number of spindles in the four cotton manufacturing States—North Carolina, South Carolina, Georgia, and Alabama—more than trebled in that decade. But this invasion of the negroes' home by cotton manufacturing has furnished little occupation to the negro. In 1900 the number of cotton-mill operatives reported in the country was 246,000, about one-third of them in the cotton mills of the south; but only a paltry 1,400 were negroes. Cotton manufacturing is far the most important industry in Georgia. The capital invested in it is

double that in any other manufacturing industry of the State. There are more than 1,000,000 negroes in Georgia, yet only 417 are reported as cotton-mill operatives. Doubtless some overflow of the general prosperity has reached the Georgia negroes, but it is only the crumbs that fall from the rich man's table.

A similar movement, beneficial to the south as a whole, but benefiting in the first instance the whites and only indirectly and remotely the negroes, may be traced in southern agriculture. The evidence is not so broad, the statistical induction is less complete; but as corroborative testimony certain aspects of it deserve attention.¹

The acreage sown to rice in the United States more than doubled between 1890 and 1900. Most of this increase has been in Louisiana, which produces about three-fifths of the American crop. The crop of Louisiana is produced mainly in three parishes which contain about two-fifths of the acreage and produce more than two-fifths of the country's yield of rice. The acreage of rice in those three parishes multiplied more than five times between 1890 and 1900. With the development of this great new industry the population of these parishes has made a long stride forward, increasing 57 per cent., or at more than twice the rate of the State as a whole. But the proportion of negroes in those parishes is only about two-fifths of the average in the State, and, while the negro population has increased in the ten years by 6,800, the white population has increased by more than 20,000. The increase of the whites in those three parishes consequent upon the prosperity of the rice industry goes far towards explaining the decrease in the proportion of negroes in the entire State of Louisiana from 50.0 per cent. in 1890 to 47.1 per cent. in 1900.

¹ For other evidence on this point see the writer's paper on "Negro Criminality" in *Journal of Social Science*, No. xxxvii. (1899) pp. 82-86.

Factors in this development have been: the discovery of abundant supplies of oil in the vicinity furnishing needed power; the construction of expensive irrigation works; the introduction of varieties of rice from which water can be drawn away towards the end of the season, leaving a firm soil at harvest time; the introduction of modern agricultural machinery, the gang-plough, the horse-drill, the twine-binder, and the steam-thresher. "One harvesting machine," we are told, "operated by one man and five mules, does in one day what formerly required a whole family and hired help to do in a season."¹ White men have come in to manage this machinery, to carry on agriculture by improved methods. They have come from the north, the increase of the natives of the North Central States in Louisiana having been marked in the last ten years. But, doubtless, the most important increase has been among the white natives of that region, who have availed themselves eagerly of the new avenues to prosperity.

It seems inevitable that changes having a similar effect upon the competition of the two races should go on in cotton growing. I may refer briefly to one that is a serious problem now in Texas and a serious menace to the rest of the cotton-growing area of the country, the insect pest known as the cotton boll weevil.

This pest first appeared in Texas in 1892 and in Louisiana in 1903, so that it required about eleven years to cross the largest State and the greatest cotton-growing State in the Union. On the average it extends its field of activity from fifty to sixty miles in each season. The work of the United States Department of Agriculture has not resulted in devising any means of preventing or materially retarding its progress, and the department expert reported in 1903 that "the steady extension of the territory affected

¹ *Twelfth Census*, vol. ix. p. 568.

by the weevil . . . has convinced all observers that it will eventually be distributed all over the cotton belt.”¹ The amount of loss already incurred and likely to result from this scourge is entirely uncertain. The census figures for total yield of cotton in 1899 and of the yield per acre do not indicate that the position of Texas as the banner cotton State is endangered. In 1889 she produced less than one-fifth, and in 1899 more than one-fourth of the cotton of the country. The only evidence I have derived from the figures in support of the claim that wide-spread injury has been done is that the yield of cotton per acre in Texas very slightly decreased from 1889 to 1899, while in the rest of the cotton States the average yield per acre was noticeably greater in 1899 than in 1889.

But in any case this pest has rendered cotton a more difficult and uncertain crop. The methods recommended for minimizing the loss are early planting, use of early maturing varieties of seed, and chopping and burning the plants as soon as the weevils have prevented the maturing of more cotton. Energy, ingenuity, and perseverance in surmounting new difficulties are far more characteristic of whites than of negroes. It is well known that a large part of the field work in the cultivation of Texas cotton is done by whites. It seems probable that, when the boll weevil reaches the cotton-growing district of the lower Mississippi, as it is almost certain to do in the next ten years, and finds a region where practically all the cotton growing is done by negro labor, it will bear more hardly upon the yield in that district than it has borne upon the yield in Texas, and that the new pest will contribute in some measure either to decrease the importance of that area as a cotton centre or else to decrease the dominance of negro labor in the cotton fields there. A movement to displace negro labor by immigrant Italian labor in

¹ Department of Agriculture, *Year Book*, 1903, p. 211.

Mississippi and Louisiana has already passed the incipient stages. I may quote a few sentences from a recent article¹ by a cotton planter of that section describing clearly the difference between the two sorts of labor as he knows them. After asserting that the number of Italians engaged in cotton growing along the lower Mississippi, while not large, "is constantly increasing," that the Italian can "produce more cotton on a given acreage than the negro," and "gather a greater percentage of it without outside assistance," and that he "works more constantly than the negro, and, after one or two years' experience, cultivates more intelligently," the writer continues: "From the garden spot which the negro allows to grow up in weeds, the Italian will supply his family from early spring until late fall, and also market enough largely to carry him through the winter. I have seen the ceilings of their houses literally covered with strings of dried butter beans, pepper, okra, and other garden products, while the walls would be hung with corn, sun-cured in the roasting ear stage. In the rear of a well-kept house would be erected a wood-shed, and in it would be seen enough firewood sawed and ready for use to run the family through the winter months. . . . I have seen them make more cotton per acre than the negro on the adjoining cut, gather it from two to four weeks earlier, and then put in the extra time earning money by picking in the negro's field. . . . Handicapped as they are at first by ignorance of the language and ignorance of the cultivation of the plant they raise, still they are becoming property owners, taxpayers, and citizens."

What is true of the Italian immigrant must be still more true of the native American from the north and west, the increase of whom in the south has already been mentioned.

¹ *South Atlantic Quarterly*, vol. iv. (1905) pp. 44-46; *The Italian Cotton Grower: The Negro's Problem*, by Alfred H. Stone.

The conclusion to which I am brought is that relatively to the whites in the south, if not absolutely as measured by any conceivable standard, the negro as a race is losing ground, is being confined more and more to the inferior and less remunerative occupations, and is not sharing proportionately to his numbers in the prosperity of the country as a whole or of the section in which he mainly lives.

How far this is due to racial characteristics, disabling him from effective competition with the rival and dominant race, and how far it is due to economic discrimination against members of the race, the evidence does not indicate. That both of these factors now co-operate in the result seems clear. That the economic discrimination has developed and is maintained, not only for economic reasons, but also in part and perhaps mainly for social and political reasons, seems equally incontestable. How much of it shall be assigned to one and how much to the other influence could be measured only if either occurred without the other.

No reason appears for expecting that the tendencies which I have sought in this article to demonstrate and to explain will soon cease to be controlling. They have set in recently, to be sure, but they seem to be increasing in scope and intensity, and to be likely to continue so to increase. Should they do so, the differences in the rates of growth of the two races at the south are likely to become wider, and the increase of negroes, both absolute and relative, to be slower than any of the foregoing estimates has assumed.

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